



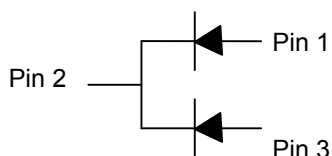
SINLOON®
POWER SEMICONDUCTORS

SB2020FCT - SB20100FCT

20A Dual Schottky Barrier Rectifier

FEATURE:

- ◆ Schottky Barrier Chip.
- ◆ Guard Ring for Transient Protection.
- ◆ Low Forward Voltage Drop.
- ◆ Low Reverse Leakage Current.
- ◆ High Surge Current Capability.
- ◆ Plastic Material has UL Flammability Classification 94V-0



MECHANICAL DATA

- ◆ Cass: ITO-220, Full Molded Plastic.
- ◆ Terminals: Plated Leads Solder able per MIL-STD-202 Method 208.
- ◆ Polarity: See Diagram.
- ◆ Weight: 2.24 grams (approx).
- ◆ Mounting: Position : Any.
- ◆ Mounting Torque: 11.5 cm·kg (10 in·lbs) Max.
- ◆ Lead Free: For RoHS/ Lead Free Version.
- ◆ Add "LF" Suffix to Part Number, See Data.

ITO-220		
Dim.	Min.	Max.
A	14.60	15.40
B	9.70	10.30
C	2.55	2.85
D	3.560	4.160
E	13.00	13.80
F	0.30	0.90
G	Φ3.00	Φ3.50
H	6.300	6.900
I	4.200	4.800
J	2.500	2.900
K	0.360	0.800
L	2.900	3.300
P	2.290	2.790

All Dimensions in mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS @TA = 25°C unless otherwise specified

Characteristic	Symbol	SB2020	SB2030	SB2040	SB2040	SB2050	SB2060	SB2080	SB20100	Unit	
		FCT	FCT	FCT	FCT	FCT	FCT	FCT	FCT		
Peak Repetitive Reverse Voltage	VRRM	20	30	40	45	50	60	80	100	V	
Working Peak Reverse Voltage	VRWM										
DC Blocking Voltage	VR										
RMS Reverse Voltage	VR(RMS)	14	21	28	32	35	42	56	70	V	
Average Rectified Outpot Current @Tc=105°C	IO	20.0				20.0				A	
Non-Repetitive Peak Forward Surtge Current	IFSM	200				200				A	
8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)											
Forward Voltage	@IF=8.0A	0.55			0.75		0.85			V	
Peak Reverse Current	@TA=25°C	0.5									uA
At Rated DC Blocking Voltage	@TA=125°C	100									
Reverse Recovery Time (Note 2)	Cj	1100									pF
Storage Temperature Range	Tj, TSTG	-55 to +150									°C

Note: 1). Measure at 1.0 MHz and Applied reverse voltage of 4.0V.DC.



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DATA CURVE

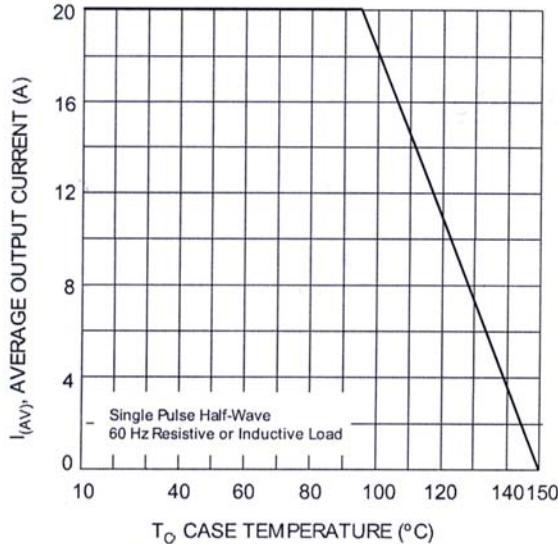


Fig. 1 Forward Current Derating Curve

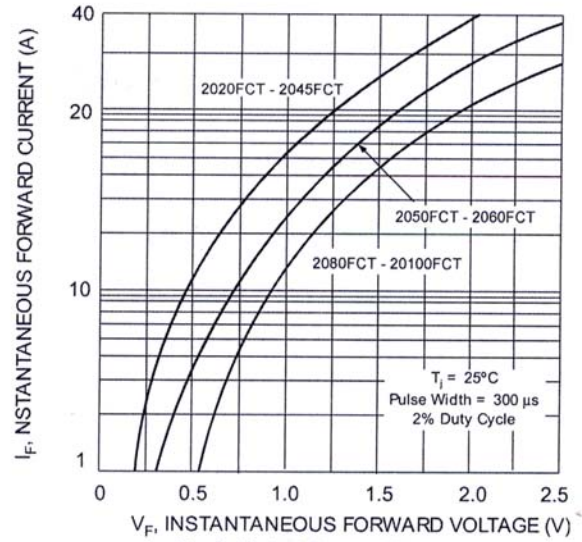


Fig. 2 Typical Forward Characteristics

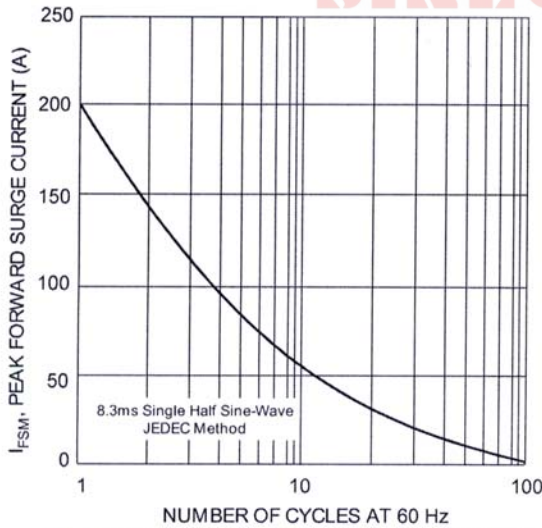


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

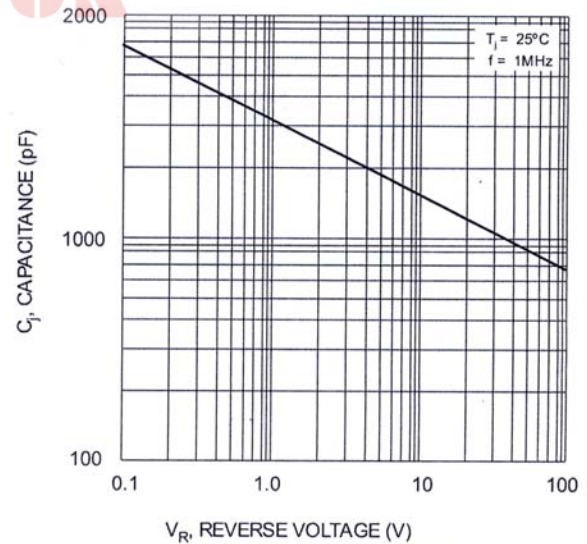


Fig. 4 Typical Junction Capacitance

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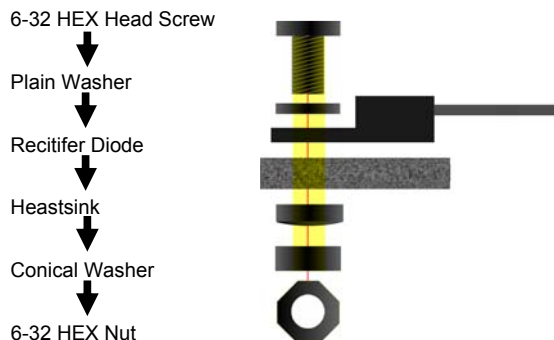
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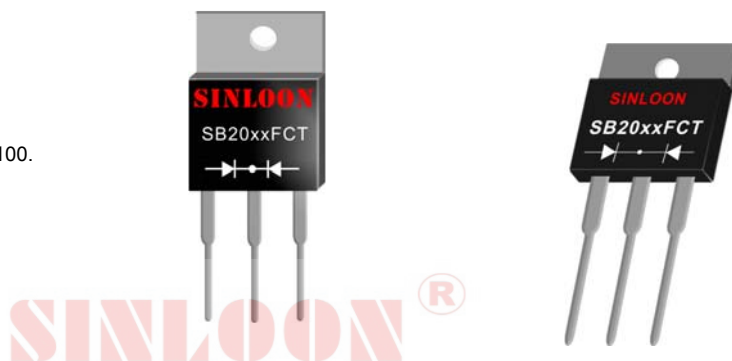
RECOMMENDED SCREW MOUNTING ARRANGEMENT

- ◆ The full molded plastic package affords a major reduction of hardware as compared to a standard TO-220 package. However, precautions should be made in mounting procedure.
- ◆ A conical washer should be used to apply proper force to the device, Screw should not be tightened with any type of air-forced torque or equipment that may cause crack on device package.
- ◆ A layer of thermal grease or thermal pad in the interface will be considerably helpful for heat dissipation



MARKING INFORMATION

XXX	=	Marking Logo
SB20xxFCT	=	Device Number
x	=	20,30,40,45,50,60,60,100.
Polarity	=	As Marked on body.



PACKAGING INFORMATION

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight
LxWXH (mm)	(Pcs)	LxWXH (mm)	(Pcs)	LxWXH (mm)	(Pcs)	(Kg)
525x31x6	50	555x145x95	2000	572x306x218	8000	19

PACKAGING INFORMATION

Product No.	Package Type	Carton Quantity
SB2020FCT	IT0-220	50 Units/Tube
SB2030FCT	IT0-220	50 Units/Tube
SB2040FCT	IT0-220	50 Units/Tube
SB2045FCT	IT0-220	50 Units/Tube
SB2050FCT	IT0-220	50 Units/Tube
SB2060FCT	IT0-220	50 Units/Tube
SB2080FCT	IT0-220	50 Units/Tube
SB20100FCT	IT0-220	50 Units/Tube

- 1). Ordering Information
Shipping quantity given is for minimum packing quantity only, For minimum. Order quantity, please consult the Sales Department.
- 2). To Order RoHS ./ Lead Free version (with Lead Free finish) . add "LF" suffix. To part uimper above. For example.
SB2020FCT-LF